

5

PROCESS FOR THE REMOVAL OF THE HYDROGEN SULFIDE CONTAINED  
IN NATURAL GAS

Abstract

10 Process for the removal of the hydrogen sulfide contained  
in natural gas, which comprises:

a. absorbing the hydrogen sulfide present in natural gas  
by means of a virgin naphtha, in an adsorbing device and  
with a molar ratio virgin naphtha/H<sub>2</sub>S ranging from 0.85 to  
15 1.5;

b. recovering the hydrogen sulfide absorbed by the virgin  
naphtha as head product of a distillation column operating  
with a reflux having a temperature of between -5 and -20°C;

c. recycling the virgin naphtha discharged as bottom prod-  
20 uct of the distillation column, to the absorption step (a);

d. introducing the hydrogen sulfide back to the production  
field of natural gas, at the temperature and pressure con-  
ditions present at the head of the distillation column.